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| 09/924,860 | 08/08/2001 | Prema Venkatesulu | D2693 | 2937 |
| 27774 | 7590 | 04/12/2005 | EXAMINER | |
| MAYER, FORTKORT & WILLIAMS, PC 251 NORTH AVENUE WEST 2ND FLOOR WESTFIELD, NJ 07090 | | | MURPHY, RHONDA L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2667 | |

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,860

Applicant(s)

VENKATESULU ET AL.

Examiner

Rhonda Murphy

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 - 6, 10,12, 17-21 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by McKinnon III et al. (US 2001/0039582).

Regarding claims 1 and 6, McKinnon III teaches a cable network, comprising: a data switching system (Fig. 2, CMTS 30) in communication with a plurality of network elements (Fig. 2, cable modems - CM 34), said data switching system being adapted to query said network elements from time to time for status information (page 5, paragraph 65: data collector 88 issues queries to the CMs; page 6, paragraph 67: the data collector initiates collection from the CMs occur at thirty minute intervals).

The data collector 88, located within network manager 86, queries the cable modems via the CMTS. It would merely be a design choice for either the CMTS, or the network manger to query the network elements, since the information is retrieved by way of the CMTS. Hence, the data switching system/CMTS is adapted to query the network elements/cable modems.

The data switching system stores the status information in a database (a database would be inherent in order to store the collected data); and a management system (Fig. 2, network access manager 86) for managing network elements on the cable network (page 5, paragraph 60), said management system being adapted to obtain network element status information from said database (page 5, paragraph 63; database manager 90 (located within network access manger 86) receives information processed by the data collector).

Regarding claims 2 and 25, McKinnon III teaches the management system adapted to manage the data switching system (page 5, paragraph 60; the data collector communicates with each CMTS and CMs for which network access is managed by the network access manager).

Regarding claims 3 and 18, McKinnon III teaches the plurality of network elements being selected from the group consisting of cable modems (Fig. 2, cable modems 34).

Regarding claims 4 and 19, McKinnon III further teaches the plurality of network elements as a plurality of cable modems (Fig. 2, cable modems 34).

Regarding claims 5 and 20, McKinnon III further teaches the data switching system adapted to route data from the cable modem users over a multiplex network interface (page 1, paragraph 5; packets are transmitted by the CMs to the CMTS using time division multiplexing).

Regarding claim 10, McKinnon III further teaches a plurality of data switching systems (CMTS's 30, Fig. 2), each which is in communication with a plurality of endpoint devices (CM's 34) and is adapted to query the endpoint devices from time to time for status

information and to store the status information in a database (as described above in the rejection of claim 1).

Regarding claim 12, McKinnon III further teaches the data switching system adapted to query the network elements every 30 minutes (page 6, paragraph 67; the data collector initiates collection from the CMs occur at thirty minute intervals).

Regarding claims 17 and 21, McKinnon III teaches a method of providing a cable network comprising a data switching system (Fig. 2, CMTS 30) in communication with a plurality of network elements (Fig. 2, cable modems - CM 34); providing a management system (Fig. 2, network access manager 86) for managing the network elements on the cable network (page 5, paragraph 60), the management system being in communication with the database (page 5, paragraph 63; Fig. 6; database manager 90, located within network manager 86, receives information processed by the data collector, wherein the database is located within the data collector); querying said network elements for status information by way of said data switching system (page 5, paragraph 65: data collector 88, issues queries to the CMTS and CMs), and storing this status information in a database (a database would be inherent in order to store the collected data); and accessing the status information from the database by way of said management system (page 5, paragraph 63; database manager 90 receives information processed by the data collector).

Regarding claim 26, McKinnon III teaches a software program disposed in tangible medium, containing sufficient instructions to implement the methodology of claim 17

(page 3, paragraphs 19 and 20; the software includes computer-executable instructions performing the steps of monitoring network access).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7, 9, 11, 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKinnon III et al., in view of Hsieh et al. (US 6,512,824).

Regarding claims 7, 9 and 22, McKinnon teaches a network access manager as an operations system to manage the data switching system/CMTS's and network elements/CMs (page 5, paragraph 60), but fails to disclose the management system as an element management system (EMS) adapted to configure the data switching system.

However, Hsieh teaches an EMS capable of configuring network elements (col. 5, lines 16-18). In view of this, it would have been obvious for the management system to configure the data switching system for the purpose of initializing or changing data within the system.

Regarding claim 11, the same limitations are taught in the rejection of claim 9.

Regarding claim 15, McKinnon teaches the same limitations as described in the rejection of claims 1, 3 and 7. McKinnon teaches a management system in

communication with the CMTS, said management system being adapted to obtain status information about the network elements from at least one file (as described in the rejection of claim 1). McKinnon does not disclose the management system as an EMS.

However, Hsieh teaches an EMS. Therefore, it would have been obvious to one having ordinary skill in the art to include an EMS as the management system for the purpose of communicating to the CMTS and cable modem, while retrieving status information about the network elements.

5. Claims 8, 14, 16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKinnon III, in view of Carlson et al. (US 2004/0210632).

Regarding claims 8, 16 and 23, McKinnon teaches a database and management system that obtains network element status information from said database, as described in the rejection of claim 7 and 15. McKinnon fails to disclose a Lifetest procedure.

However, Carlson discloses a Lifetest procedure described as LTP, which derives state information from network devices (page 1, paragraph 13 and 55-56). In view of this, it would have been obvious to one skilled in the art to include a Lifetest procedure for the purpose of obtaining state information from the network devices.

Regarding claim 14, McKinnon teaches a data switching system, but fails to teach the assignment status selected from up, down or transitional.

However, Carlson teaches the assignment of up, down and unknown operational status (page 1, paragraph 13 and 57). In view of this, it would have been obvious for

McKinnon to incorporate Carlson's operation status in order to indicate the state in which the device is operating.

6. Claims 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKinnon III et al, in view of Applicant's Admitted Prior Art (AAPA).

Regarding claims 13 and 24, McKinnon teaches a DOCSIS MIB on page 6, paragraph 66. McKinnon fails to explicitly disclose a DOCSIS radio frequency MIB.

However, AAPA teaches, on pages 6-7 of the specification, that DOCSIS requirements specify an RF Management Information Base (MIB). Therefore, it would have been obvious to one having ordinary skill in the art to incorporate a DOCSIS RF MIB into McKinnon's system for the purpose of enabling system vendors to develop a management system to support spectrum management and other operations.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Bialk et al. (US 2002/0169862) discloses a network management method and system for managing a broadband network providing multiple services.

*Gupta (US 2003/0009543) discloses a network management system and computer-based methods for network management.

*Motoyama et al. (US 2002/0152292) discloses a method and system of remote support of device using e-mail.

*Chang et al. (US 2002/0112067) discloses a method and system for network management with per-endpoint adaptive data communication based on application life cycle.

*Benfield et al. (US 2003/009553) discloses a method and system for network management with adaptive queue management.

*Chisholm (US 6,697,970) discloses a generic fault management method and system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Rhonda Murphy
Examiner
Art Unit 2667

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